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PROGRAM AND MANAGEMENT SUPPORT FOR THE OFFICE  
OF MILITARY PERFORMANCE ASSESSMENT TECHNOLOGY

ANNUAL REPORT

MARVIN FITTS

APRIL 30, 1991

Supported by

U.S. ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND  
Fort Detrick, Frederick, Maryland 21702-5012

Contract No. DAMD17-90-C-0061

Morgan Management Systems, Inc.  
5401 White Mane  
Columbia, MD 21045

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REPORT DOCUMENTATION PAGE

April 30, 1991

Annual 8 Mar 90 - 7 Mar 91

Program and Management Support for the Office of  
Military Performance Assessment Technology

DAMD17-90-C-0061

Marvin Fitts

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Columbia, MD 21045

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Contract No. DAMD17-90-C-0061  
30 April 1991

1. Contract No.: DAMD17-90-C-0061 and Modification Nos. P00001, P00002, P00003, and P1004
2. Contractor: Morgan Management Systems, Inc.  
12075B Tech Road  
Silver Spring, Maryland 20904  
  
Principal Investigator: Marvin L. Fitts  
Telephone No.: 301-236-5400
3. Date of the Report: 30 April 1991
4. Reporting period: 08 March 1990 - 7 March 1991
5. Project Title: Program and Management Support for the Office of Military Performance Assessment Technology.
6. Current staff with percent of effort of each on project:

Three Morgan Management Systems' positions are assigned full-time (100%) to this contract, and two positions are part-time. Hours and percent of effort for each position for this reporting period are listed below:

POSITION	QUARTER	MAN HOURS		% of EFFORT
		CUMM 91	CUMM	
PROJECT DIRECTOR	72	72	325	15
PROJECT MANAGER	483	483	1920	100
SYSTEMS MANAGER	473.5	473.5	1980.5	100
SECRETARY/ADMIN ASST	426.5	426.5	1596	100
SECRETARY	74	74	165.7	2
TOTAL	1529	1529	5987.2	

7. Comments on administrative and logistical matters during the fourth quarter:

- a. Random Access Memory (RAM) upgrades ordered last quarter were installed, and previous problems with memory deficiencies no longer slow processing efforts on the OMPAT workstations.

b. An automatic feeder for the Hewlett-Packard text scanner was purchased during the fourth quarter. Due to the large volume of text scanning for addition to the PIMS, installation of an automatic feeder became a necessary to aid in scanning procedures.

c. Since the OMPAT Bulletin Board Systems is heavily used (over 200 members in the user database), the initial BBS node was often taxed beyond its capabilities. Due to continued user requests, the decision was made to add a second BBS node to provide easier access to the board. The new node was added to the communications configuration through the following procedures: installation of a new telephone line, arranging service to provide a single access telephone number for both nodes, acquiring a terminal to house the second node, and a Mailnet software upgrade to tie in the second node to the initial node.

d. Upon request of the Director, OMPAT, accounts for on-line literature search capabilities were obtained through the National Library of Medicine's MEDLAR system, and the BRS Colleague system. The necessary software was ordered, received and installed, and an existing communications server was programmed to automatically dial both search services using Telix 3.1.

e. During the first year, office space, office furniture and equipment, and telecommunications systems were procured and installed. Procurement, installation, and modification of computer hardware and software for the Performance Information Management System (PIMS) was a continuing effort. Development of the database system for acquiring and storing data and papers developed by the JWGD3/OMPAT program has been a major and continuing effort.

8. Summary of approximate Principal Investigator expenditures on the contract to date:

EXPENSE	BUDGET	EXPEND	CUMM	PROJECTED CUMM	VARIANCE CUMM/PROJ
DIRECT LABOR	\$215,059	31,721	125,240	129,740	-0.035
FRINGE BENEFITS	62,367	9,199	36,320	37,625	-0.035
DIRECT COSTS	167,523	15,867	134,359	131,354	0.023
SUBCONTRACT	12,000	6,200	13,325	8,000	0.666
OVERHEAD	219,335	30,234	148,437	147,225	0.008
FEE	51,508	7,271	34,630	34,109	0.015
<b>TOTAL</b>	<b>\$727,792</b>	<b>\$100,493</b>	<b>\$492,311</b>	<b>\$488,053</b>	<b>0.015</b>

Handwritten notes and stamps in the bottom right corner, including a checkmark, the word "Dist", and "Special".

9. Progress during the quarter:

a. Administrative Support of Program Management.

(1) Operation of OMPAT Office. Development of procedures for effective office operations were completed and implemented during the first year. Functions for which specific procedures and controls were developed included receiving and distributing OMPAT correspondence, reports and software, development of and distributing OMPAT telephone directories and distribution lists, and establishing communications links and contacts with the Research Management Office and other WRAIR and USAMRDC offices necessary to the operation of the OMPAT Field Office.

(2) Office Management Tasks: ZY INDEX was installed as the automated file retrieval system for tracking OMPAT project, program budget, correspondence and historical records. An OMPAT calendar, computer aided correspondence log, distribution lists and mailing label databases are integral parts of the system.

(3) Telecommunications:

OMPAT Bulletin Board System (BBS): The OMPAT BBS was installed as the major communications link between OMPAT principal investigators, laboratories and the OMPAT Field Office. Software utilized is MAILNET. The BBS consists of five user boards: Main, New, Administrative, Betatest, and Horizon. During the fourth quarter, it was determined that heavy use of the BBS pointed to the need for more capacity and a second BBS node was added to provide faster, easier access to the board.

OMPAT FAX: A QUADRAM Facsimile Board was initially installed in a PC on the Local Area Network (LAN), which proved to be ineffective. the faxing function was extremely slow and the process tied up the printer and slowed the file server and all stations served. A Panasonic Panafax UF-300 plain paper, inkjet facsimile was purchased to perform the fax function independent of the communications workstation and printer.

(4) Local Area Network (LAN): A 10-Net LAN was purchased and installed in both the OMPAT Field Office and the WRAIR OMPAT Office and communication between the two offices was established and tested. PC ANYWHERE was selected as the communications software and procedures are being developed and explored for the possible extension of this communications capability to participating laboratories. The LAN system development is a continuing process. Hardware and software acquisitions for the fourth quarter are listed below:

- Layout Version 2.0 Objects, Inc.
- PC/Anywhere LAN V4.03a

- TransTest Update (MaxThink 1990)  
Houdini and Hynet (MaxThink 1990)  
Double Demo (MaxThink 1990)
- SUPERCONVERTER Data Translator
- HyNet Lan Utilities (Neil Larson)  
Hynet LAN  
HyperBBS (MaxThink 1990)  
HyperTerm (MaxThink 1990)  
Double-Demo HyperText (MaxThink 1990)

b. Administration of Contract, MIPR and Command Operating Budget (COB) Program Elements.

Program funding documentation was initiated and developed for the FY1991 OMPAT program projects and contracts under the direction of the Director, OMPAT, and submitted to USAMRDC, SGRD-PLP for review. Program budget documents, USAMRDC Form 9's and DD Form 1498's were prepared for fourteen extramural projects and one contract.

Review and Analysis (R&A) documentation submitted by participating laboratories were edited, formatted, and summarized for the FY91 and FY92 R&A Report. The document was used in the preparation of slides for the R&A presentation for both years. In addition, Harvard Graphics multiple charts were prepared for the FY92 OMPAT projects.

Procedures for monitoring contract, MIPR and COB program element deliverables were developed and implemented. Quarterly, Annual and Final Reports for projects completed back to FY89 are being monitored and reporting requirements are being reinforced. A Reports Summary listing Quarterly, Annual and Final Reports due is being published quarterly. Hardcopy reports received continue to be logged, reproduced and distributed, and archived in appropriate project files and PIMS.

c. Administrative Support of PIMS

(1) Data and Text Entry: Two instructional meetings were chaired by the Director, OMPAT, to explain the use and function of Hynet, the software chosen for creating a hyper-text PIMS database for on-line retrieval. Scanning, editing and formatting efforts continue, and currently, the OMPAT administrative staff is working on the entry of the JWDG3 MILPERF report documentation. Quarterly, annual and final reports are being prepared for entry into the PIMS.

NOTE: Quarterly systems status report: Data related to the PIMS database, the Technology Transfer Database and the OMPAT Product Archive are contained in the consolidated PIMS Quarterly Status Report, Appendix A.

(2) Literature Searches: The following literature searches were performed in this reporting period:

- Carbon Monoxide and Methemoglobin
- Carbon Monoxide or Methemoglobin, Reaction Time and Motor Skills
- Carbon Monoxide or Methemoglobin, Human Behavior, Performance and Cognition

f. Management of OMPAT Meetings. The OMPAT Field office provided meeting support and furnished audio/visual equipment for the following meetings this quarter:

- 17 Jan 91 Synthetic Task Authoring System  
Dr. Frederick Hegge, Dir OMPAT  
Joanne Marshall-Mies, HTI  
Ted Olmstead, HTI
- 18 Jan 91 Criterion Task Set  
Dr. Frederick Hegge, Dir OMPAT  
Mr. Mark Crabtree, LOGITEC  
Dr. Robert Schlegel, Univ. of OK  
Dr. Gary Reid, AAMRL  
LCDR Dennis Reeves, USN
- 29 Jan 91 Synthetic Task Authoring System  
Dr. Timothy Elsmore, Dep Dir, OMPAT  
Joanne Marshall-Mies, HTI  
Fred Gray, HTI  
MAJ Robert Kehlet, DNA  
Dr. David Thorne, WRAIR  
LCDR Dennis Reeves, USN  
Dr. Gary Kay, Georgetown Univ  
Dr. Samuel Moise, ERGOTECH
- 08 Feb 91 Unified Tri-service Performance Assessment Battery  
LCDR Dennis Reeves, USN  
Kathleen Winter, NCTS  
Samuel Lacour, NAMRI  
Dr. John Thomas, NMRI
- 13 Mar 91 Blue Print of the Battle Field  
Dr. Frederick Hegge, Dir, OMPAT  
Dr. Donald Headley, USARIBSS  
Dr. Dave Promisell, USARIBSS

- 15 Mar 91      Automated Performance Testing  
 Dr. Robert Kane, Univ of Mass  
 LCDR Dennis Reeves, USN
- 28 Mar 91      Synthetic Task Authoring System  
 Dr. Frederick Hegge, Dir, OMPAT  
 Dr. Timothy Elsmore, Dep Dir, OMPAT  
 Joanne Marshall-Mies, HTI  
 Mr. Fred Gray, HTI  
 MAJ Robert Kehlet, DNA
- 29 Mar 91      Human Performance Database Survey  
 Dr. Frederick Hegge, Dir, OMPAT  
 Dr. Timothy Elsmore, Dep Dir, OMPAT  
 Dr. Samuel Schiflett, USAFSAM  
 Patti Mason, SRL  
 Dave Strome, SRL  
 LCDR Dennis Reeves, USN

g. NCO Career History Project. Project involves abstracting, data analysis, and editing of NCO histories to describe the state of morale and discipline in the Army following Vietnam. The project involves two processes prior to the evaluation and implementation of the computer sorts: preparing the data for sorting (editing and abstracting processes) and mastering the sort and retrieval software routines. To date, all seven targeted files have been cleaned and edited and five of the seven have been abstracted. Mastering the computer routines involves developing and testing three separate sort and retrieval programs. The first program based on artificial intelligence and natural language has been evaluated and determined to be unusable because its equivalencies dictionary is unreliable and would need restructuring. The second program, currently being evaluated, has shown promise, but it is cumbersome program which does not indicate the specific structure the data files should be in for optimum scanning. The third program has been installed and is awaiting the arrival of the documentation.

10. Brief Statement of plans for the next quarter.

a. Administrative Support of Program Management: Continue to perform office management tasks and refining procedures for the telecommunications systems and the LAN. Provide support with posters and presentations for the Bioscience Review on 7-8 August 1991.

b. Administration of Contract, MIPR and COB Program Elements: Continue monitoring contract and MIPR project deliverables and the processing of funding documents for program projects and contracts. Develop FY92 budget and funding levels based on USAMRDC directions and prepare funding documents based on approved funding levels.

c. Administrative Support of PIMS: Proceed with efforts to scan germane documentation for admission to the PIMS. Continued to learn the specifics of using hyper-text software for entering text into PIMS for the OMPAT on-line retrieval system.

d. Management of OMPAT Meetings: Meetings planned for next reporting period are as follows:

04 Jun 91 In-Process Review of the joint Horizon Technology, Inc. and the Defense Nuclear Agency effort.

Aug 91 OMPAT Technical Advisory Group meeting is being planned

e. NCO Career History Project: The project has been proposed for modification to increase the number of case histories to be processed from seven to twenty and from 2000 to 6000 pages.

  
Prepared by: M. L. FITTS, PROJECT MANAGER  
C. L. KRESSLEIN, SYSTEMS MANAGER  
C. A. DEW, ADMINISTRATIVE ASSISTANT